



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,163	07/06/2001	Ulrich Begemann	P20906	9779

7055 7590 10/04/2002

GREENBLUM & BERNSTEIN, P.L.C.
1941 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

HASTINGS, KAREN M

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 10/04/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/899163

Applicant(s)

Begemann et al

Examiner

HASTINGS

Group Art Unit

1731

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 1-02, 10-01, 7-01
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 111; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-49 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-47 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4, 5
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

Art Unit 1731

Informalities:

In the list of reference characters on page 13 of the specification, character Nos. 34-44 are not shown on any of the Figures and also do not appear to be discussed in the body of the specification. Clarification and correction are necessary.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the doctors arranged to clean a circulating belt, the rear doctor connected to the boundary layer doctor as set forth in claim 3, a press arranged before the belts as set forth in an alternative of claim 8, etc. must be shown or the feature(s) canceled from the claim(s). Note none of the Figures exemplifies the alternative claim embodiment of the device of two doctors cleaning a circulating belt versus a rotating roll. No new matter should be entered.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit 1731

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

At least claims 1-3, 15, 17, 18, 19, 22-24, 27 and 28 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Meschenmoser '514.

Art Unit 1731

Meschenmoser shows, especially at Figure 5, a device as claimed in these claims, see also col 8 lines 55-57 which teaches two scraper blades on the roll enhances the cleaning effect.

Note ~~the~~ boundary layer doctor~~s~~ of claim 3 encompasses the scraper blade 58 of Figure 5; wetting spray pipe 80 of Figure 3 reads on the cleaning device of claims 15, 17, 18 and 19; the mechanical structural setup of the doctor blade with the housing beam 56 may be considered to be ~~a~~ a housing~~s~~ with the cleaning device 80 surrounded by that beam 56/housing 56. Note with respect to claim 28, when read in its broadest reasonable light, is fairly taught by the two doctors 92 and 60 of Figure 5 which form with a portion of beam 56 a "housing" that seals off said surface of roll 36. With respect to claims 22-24, these merely set forth operating pressures for the cleaning spray and it is deemed inherent that the spray pipe 80 is capable of being set at these operating pressures; that is, the spray 80 of Meschenmoser would inherently be capable of admitting the water spray under the recited pressures.

Claims 1-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Meschenmoser.

Meschenmoser et al. is applied as above. For completeness all claims are included. For example only if it is not inherent that the spray 28 of Meschenmoser may be operated at the

Art Unit 1731

parameters set forth in claims 22-24, alternately it would have been prima facie obvious for one of ordinary skill in the art to optimize the pressure of the wetting/cleaning spray device.

Furthermore, optimizing the distances as set forth in claims 5-7 would have been prima facie obvious to one of ordinary skill in the art, especially in the absence of any criticality or unexpected results from the recited dimensions.

With respect to other dependent claims, the use of traversing sprays, rotatable sprays combined blowing and suction, etc. are all very well known technical features to one of ordinary skill in the art in cleaning a press roll or felt and as such would have been prima facie obvious additions/modifications to the cleaning device of Meschenmoser. Furthermore, the use of suction after a press (re claim 8) is very well known to one of ordinary skill in the art and for example at Figure 2 of Meschenmoser the use of a suction device anywhere along the length of travel of the felt after it leaves the press 18, 16 would read on this claim as currently worded. With respect to claim 12, the use of extended nip press is a very well known design alternative for a roll press.

At least claims 1, 15, 16, 27 and 28 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Garcia Pastor et al.

Art Unit 1731

Garcia Pastor et al. teaches a cleaning doctor blade combination wherein two doctor blades 1 and 2 on the surface of a roller. This is all that is needed to satisfy claim 1. With respect to claims 15, 16, 27 and 28, these read on the forced water circulation cleaning chamber in between the two blades. The two blades with the chamber in between them clearly comprise a housing that is sealed off from the roll surface by the two doctors as set forth in claims 27 and 28. No structural differences are seen between this reference and these claims.

At least claims 1, 2, 8 and 15-28 are rejected under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under 35 ***U.S.C. 103(a)*** as obvious over Boeck.

Boeck shows two doctor blades arranged one behind each other to clean a roll with a cleaning spray in between and also discloses a suction globe 91 surrounding the spray cleaning means. (Compare for example only Figure 5 of Boeck et al. to Figures 2 and 3 of the instant case). For example only, see first blade 82, second blade 84 of Figure 5 with cleaning and suction device located therebetween and a further cleaning device at 88, etc. Note with respect to claims 27 and 28, this reads on Figure 2 of Boeck which shows a beam/housing with a doctor blade at either end of the housing to close off the surface by the two doctors.

Art Unit 1731

Any differences that may be gleaned from the current claim language are deemed prima facie obvious to one of ordinary skill in the art as drawn to such well known features they would be immediately envisioned to one of ordinary skill in the art upon reviewing this reference. For example only, column 3 lines 5-20 disclose the alternatives of using rotating jets over the entire roll width or rotating jet units that may be transversely moved.

Claims 29-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to the claims above, and further in view of Justus '694 and/or Justus '697.

Justus '694 exemplifies that it is known to clean a grooved or blind bore surface with scraper means, brushes, air jets and water jets. See Figure 1. Justus '697 likewise exemplifies cleaning a grooved press roll with a doctor blade - see col 11, lines 25 -57. It would have been prima facie obvious to use the double doctor blade combinations with cleaning spray/suction as set forth in the applied references above to be well known for cleaning various paper machine rolls in order to clean a grooved roll, for the known advantages of cleaning a roll with the combination of two doctor blades etc. as taught in the variety of references applied above.

Once one applies a double doctor blade cleaning apparatus as is well known to any appropriate roll to be cleaned, such as a

Art Unit 1731

grooved roll, then one inherently obtains many of the features set forth in these claims, that is since the unit for evening out the amount of water may be the doctor blade, clearly the doctor blade(s) of the applied references would be capable of performing this function. Furthermore, the use of an air jet to aid in cleaning a grooved roll is known as exemplified by 13C of Justus '694. With respect to claims 45-47, it is well known that a doctor blade applied against a fast moving roll, and it is very well known that press rolls in a paper making machine are very fast moving rolls, will produce a foil suction/underpressure. Thus the use of a well known foil doctor would have been immediately envisioned/encompassed by the teachings of the applied references.

Claims 9-14 are also rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to the claims above, and further in view of Ely, Sr.

Ely, Sr. is cited to exemplify that the use of a suction guide roll 20 following a press nip formed at 16, 17 is well known in the art and is exemplified throughout Figures 1-4 of Ely, Sr. This is cited to exemplify that it would have been immediately envisioned by one of ordinary skill in the art (or alternately would have been prima facie obvious) to use the double doctor blade cleaning devices of the primary references on

Art Unit 1731

any felt guide roll including a felt suction roll such as shown in Figures 1-4 of Ely, Sr. in order to obtain the known advantages of cleaning the roll.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Note many other references anticipate at least claim 1, and render many others prima facie obvious, but in order to avoid unduly multiple rejections are not applied at this time. For example only, Figures 11, 12 of DE '958 clearly show two doctor blades 82 in Figure 11 with another doctor foil blade 128 therebetween, and two doctor foil blades 128 in Figure 12, cleaning a roll surface. Suction is applied to an enclosed housing around the roll that is sealed off with the two doctor blades 82 in Figure 11 and by doctor blade 82 and seal means 100 in Figure 12.

Turtinen et al double doctor blade to clean a paper machine roll likewise anticipates at least claims 1 and 15.

Filzin et al. is cited to exemplify that it is well known to have a grooved or smooth belt around an extended nip press.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Hastings whose telephone number is (703) 308-0470. The examiner

Serial No. 09/899,163

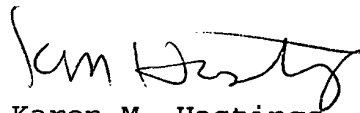
-10-

Art Unit 1731

can normally be reached on Monday through Thursday from 6:30 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Steve Griffin, can be reached on (703) 308-1164. The fax phone number for this Group is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0651.



Karen M. Hastings
Senior Primary Examiner
Art Unit 1731

9/02

KMH/cdc
September 25, 2002